

Federal Communications Commission
Washington, DC 20554
December 2011

Comment in Response to:

PS Docket No. 10-255, Framework for Next Generation 911 Deployment

RESPONSE TO:

33. *Message-Based Text.*

With respect to SMS (Short Message Service), though I fully agree that the service can be “slow and unreliable” I believe that the establishment of priority processing of both SMS and MMS (Multimedia Message Service) to 9-1-1 Communication Centers can increase both the delivery and reliability of text, photos and video being delivered to 9-1-1 Call Takers.

With respect to delivery confirmation of SMS and MMS, currently this functionality can be handled at the mobile handset level as most mobile handsets have settings that allow for delivery confirmation. Additionally any 3rd generation application developed to handle SMS / MMS, etc. will need to have an automated confirmation receipt sent to the individual’s mobile handset that sends either SMS or MMS to a 9-1-1 Communications Center.

RESPONSE TO:

34. *Real-Time Text.*

Real-Time Text certainly will have its advantages and should be included as a delivery format for communication with 9-1-1.

RESPONSE TO:

35. *Still Images (Photos).*

Live video streaming from cell phones and fixed location video feeds of incidents leading to situational awareness will definitely replace still images in addition to video captured using a cell phone then sent to 9-1-1 as MMS. However, while devices, network and infrastructure become aligned, the delivery of both SMS and MMS (photos/video with/without sound) will be the initial phase of format delivery.

RESPONSE TO:

37-38 *Telemetry Data, Auxiliary Medical and other Personal Data.*

X-Y coordinates (or GPS location) are currently data elements capable of being captured by cell phone devices. With this being the case photos, video and text messages can easily be transmitted to 9-1-1 as part of the data stream causing a map to be populated on the Call Takers screen showing the location where the SMS or MMS was sent from leading to rapid response. Along with the X-Y coordinates an ID file can be transmitted in the background containing the caller’s personal data and medical history.

RESPONSE TO:

2. Primary vs. Secondary Usage of Media Types

With the rate at which technology is advancing video should be listed as a Primary Media Type and not as a Secondary Media Type. With wireless networks increasing their speed to 4G LTE it is evident from consumer demand that speeds/bandwidth will continue to increase allowing for video to become more widely used.

RESPONSE TO:

3. SMS for Emergency Communications

With billions of text messages being sent/received annually in the U.S., text messaging is clearly a broadly used means of communication. However, its effectiveness as a tool for mass Emergency Communication does have its limitations. These limitations stem from the fact that SMS text messages require the sender to send 1 text messages at a time and the sender must know the cell phone number(s) of the individual(s) the text message is being sent to.

Despite its limitations the use of SMS for notifying smaller groups of individuals has its place. However, for mass emergency notifications a more effective means of sending text messages would be the use of Cell Broadcasting technology. This technology does not require the sender to know the cell phone numbers of the individuals the text message is being sent to. As long as their cell phone is on, and the person and their cell phone are in the designated broadcast area, they will receive the emergency text alert on their cell phone.

RESPONSE TO:

4. NG911 Applications for Persons with Disabilities and Special Needs

Response included in aforementioned comments.

RESPONSE TO:

B. NG911 Network Architecture

3. Interoperability and Standards

While the industry moves to establish call control functions and default media codecs standards, the technology currently exist to handle the close to 200 codecs.

RESPONSE TO:

9. International Issues

Using Relay Services when contacting Emergency Services while traveling outside of the U.S. is recommended, however, directing these contacts to the U.S. can cause delays in local response unless GPS is tied into the incident and a simultaneous connection to Relay Services, the local Emergency Responders and U.S. based 9-1-1 is made. Since response time is such an extremely critical element handling each contact separately will lower the effectiveness of a rapid response scenario.

IN CLOSING:

Though the Framework for Next Generation 911 Deployment still needs to be built, technology currently exist that will allow 911 Communication Centers to handle

Photos, Video (with/without sound) and text messages transmitted over the wireless cell phone networks. While SMS and MMS from wireless devices will currently not terminate at a 911 Communications Center via the 911 network (without benefit of modification at the PSAP level), these formats can effectively be handled via a 3rd party web based application. This 3rd party application should be viewed as the first phase of moving towards the handling of SMS and MMS by 911 Communication Centers.

With the U.S. having over 327,577,529 cell phones and approximately 87% of these cell phones having cameras (or 282,992,450) the chances of an incident called into a 911 Communications Center coming from a cell phone with a camera (as you can surmise) is statistically high. According to *FCC Chairman, Julius Genachowski in 2010 he stated; "of the 230 million annual calls to 9-1-1 (630 K daily), roughly 70% (7 of 10) are being made to 9-1-1 from cell phones"*.

Statistically speaking and based on the aforementioned data, of the 230,000,000 calls that are made to 911 approximately 140,000,000 of these annual calls to 9-1-1 are made from cell phones with cameras.

Add to all this the fact that 26.6% of American households do not have landlines, 44% of individuals ages 18 to 40 only utilize cell phones and 47% of renters also only use cell phones as a means of communication, it is becoming evident that citizens are moving to cell phones as their only means of communication and landlines will at some point forward become obsolete.

Given the fact that cell phone usage continues to increase and the Framework for Next Generation 911 still needs to be built - adapting the handling of SMS and MMS via a stand-alone application that resides on the Call Takers desktop and handles SMS and MMS outside of the 911 network can not only be accomplished today but is highly advisable based on the apparent need.

Michael Romano
CEO / COO
Cell Phone C.O.P.S. (Concern Over Public Safety)
University of Central Florida Technology Incubator
12201 Research Parkway
Orlando, Florida 32826
michael@cellphonecops.com
(407) 914-8604